



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,062	10/28/2003	Osamu Kizaki	244515US2	3829
22850 7590 09/22/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER CHENG, PETER L				
ART UNIT 2625		PAPER NUMBER		
NOTIFICATION DATE 09/22/2009		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com

oblonpat@oblon.com

jgardner@oblon.com

ADVISORY ACTION

Response to Arguments

1. Applicant's arguments filed **7/10/2009** have been fully considered but are not persuasive.

2. With respect to Applicants' argument that

"in DENNIS, no determination is made in the connected apparatus, that is on the printer side, as to whether the format is inversely convertible"

has been considered.

In reply, it is respectfully submitted that the current claims do not cite that "*a determination is made in the connected apparatus*", and the originally-filed specification does not appear to support this limitation.

For example, with reference to step **S706** of **Fig. 28**, the "SCS" **20** of *the image-forming apparatus* "determines whether the extracted format is inversely convertible in the MLB 45 of the slave unit"; **page 45, lines 14 - 16**.

3. With respect to Applicants' argument that

"the load balancing illustrated in Figure 4 of DENNIS is based on an assumption that C, a compression format, or A, an input format on the host side, is convertible by the printer to B, as an output format",

"DENNIS neither teaches nor suggests determining whether C or A is convertible, not to mention inversely convertible, to B by the printer",

and therefore,

"DENNIS neither teaches nor suggests 'the format[[i.e.]] determination part being further configured to determine the transfer-time format based on a determination as to whether the format of the image data is inversely convertible in the connected apparatus', as recited in Claim 1"

has been considered.

In reply, it is respectfully submitted that *the load balancing illustrated in Figure 4 of DENNIS is not based on an assumption that C, a compression format, or A, an input format on the host side, is convertible by the printer to B, as an output format.*

Instead, with reference to **Fig. 2**, DENNIS teaches that the "load balancing is based on a variety of parameters such as the *relative computing power of the host computer 202 and the printer 218*, the speed of the data communications channel, *the relative sizes of*

the host resource store 210 and the printer resource store 220, the complexity of the printing task, and the tasks currently being performed by the host computer 202 and the printer 218"; **col. 15, lines 36 - 42.** ("The printer resource store 220 may be [part] of a printer memory 222"; **col. 9, lines 6 - 7.**)

"The time available to render a band depends on the printer speed and the printer memory 222"; **col. 25, lines 41 - 42.** That is, the time is dependent upon the resources of the "printer" 218.

"If the resource assembler 208 determines that the band *cannot be rendered in the allowable amount of time*, the host computer 202 will render the band into a bit-map data file"; **col. 25, lines 44 - 46.**

While the *data transmission (transfer) format is determined based on the complexity of data*, the "data transmission (transfer) format" is also based on the "resources of the printer" (i.e., printer speed and printer memory).

As DENNIS teaches, "If the printer 218 can process the data portion in the A form (see FIG. 4) in real-time, the RPL is transferred to the printer. This is illustrated as option 2 in FIG. 4"; **col. 26, line 66 - col. 27, line 1.** Otherwise, the "host computer" **202** must first render the data to format "B" (i.e., options 1 or 3 in **Fig. 4**).

That is, DENNIS teaches that if the resources of "printer" 218 are not sufficient, it can not be assumed that format "A" is convertible by the printer to format "B".

With regards to format "C", DENNIS teaches that "the only concern is whether the bit-map data file rendered by the host computer 202 will fit within the printer resource store 220 (see FIG. 2)"; **col. 27, lines 36 - 38**. "If the bit-map data file rendered by the host computer 202 will not fit within the printer resource store, the resource assembler 208 will compress the bit-map data file. *The resource assembler 208 can determine the amount of compression required before actually creating a compressed bit-map data file*"; **col. 27, lines 41 - 46**.

That is, format "C" is *not a single data format* but includes both "lossless" and "lossy" compression formats.

For example, "RLE compression does not result in the loss of resolution because all data is transferred to the printer"; **col. 27, lines 66 - 67**. However, "if RLE compression will not result in the bit-map data file fitting within the printer resource 220 (see FIG. 2), the host computer 202 will resort to lossy compression in which some data is lost"; **col. 28, lines 1 - 4**.

Again, DENNIS teaches that if the resources of "printer" 218 are not sufficient, it can not be assumed that one of the formats for "C" is convertible by the printer to format "B".

For both formats "A" and "C", the *determination as to whether these formats are inversely convertible* to format "B" is based on the resources of the "printer" 218.

Therefore, DENNIS teaches '*the format determination part being further configured to determine the transfer-time format based on a determination as to whether the format of the image data is inversely convertible in the connected apparatus*'.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter L. Cheng whose telephone number is 571-270-3007. The examiner can normally be reached on MONDAY - FRIDAY, 8:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Y. Poon can be reached on 571-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/

Supervisory Patent Examiner, Art Unit 2625

/plc/

September 15, 2009